**AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111** 

Serial Number: 10/608,050

Filing Date: June 27, 2003

Title: HYBRID PACKAGE WITH NON-INSERTABLE AND INSERTABLE CONDUCTIVE FEATURES, COMPLEMENTARY

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Dkt: 884.826US1 (INTEL)

RECEPTACLE, AND METHODS OF FABRICATION, ASSEMBLY, AND OPERATION THEREFOR

Assignee: Intel Corporation

## IN THE CLAIMS

Please amend the claims as follows:

- 1. (Currently Amended) An electronic circuit package comprising:

  at least one non-insertable feature at a first surface of the electronic circuit package; and
  at least one conductive, low insertion force, insertable feature extending perpendicularly
  from the first surface in a vertical direction, wherein the at least one conductive, low insertion
  force, insertable feature contacts conductive structures within the electronic circuit package, and
  wherein the at least one conductive, low insertion force, insertable feature is configured to
  receive a horizontal force, provided by a horizontal force mechanism, to engage the at least one
  conductive, low insertion force, insertable feature with a receptacle.
- 2. (Original) The electronic circuit package as claimed in claim 1, wherein the electronic circuit package comprises an integrated circuit package.
- 3. (Original) The electronic circuit package as claimed in claim 1, wherein the at least one non-insertable feature includes a land grid array land.

## Claims 4-5. (Canceled)

- 6. (Original) The electronic circuit package as claimed in claim 1, wherein a total feature count is greater than 400 features, and the total feature count is a sum of a first number of non-insertable features and a second number of insertable features.
- 7. (Original) The electronic circuit package as claimed in claim 1, wherein the at least one non-insertable feature is coupled to circuits that use or produce input/output signals, and the at

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least one insertable feature is electrically coupled to circuits that consume power or require ground connection.

8. (Currently Amended) A receptacle comprising:

a rigid body having a first surface;

at least one non-insertable contact <u>having contact portions exposed</u> at [[a]] <u>the</u> first surface of the <u>receptacle</u> rigid body; and

at least one insertable contact having an opening openings on the first surface and internal conductive structures within the rigid body,

wherein the at least one non-insertable contact and the at least one insertable contact are arranged to make electrical contact with non-insertable features and insertable features of a single electronic circuit package brought into contact with the receptacle.

- 9. (Original) The receptacle as claimed in claim 8, wherein the receptacle comprises a socket.
- 10. (Original) The receptacle as claimed in claim 8, wherein the receptacle comprises a printed circuit board.
- 11. (Original) The receptacle as claimed in claim 8, wherein the at least one non-insertable contact includes a land grid array contact.
- 12. (Original) The receptacle as claimed in claim 8, wherein the at least one insertable contact includes a pin contact.
- 13. (Original) The receptacle as claimed in claim 8, wherein the at least one insertable contact includes a low insertion force contact.

Claims 14 - 26. (Canceled)

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27. (Currently Amended) An electronic system comprising:

an electronic circuit package having at least one non-insertable feature at a first surface of the package, and at least one insertable feature extending perpendicularly from the first surface;

a receptacle, coupled to the electronic circuit package, and having a rigid body having a first surface, at least one non-insertable contact having contact portions exposed at the first surface of the rigid body, and at least one insertable contact having openings on the first surface and internal conductive structures within the rigid body, wherein when the electronic circuit package is joined with the receptacle, the at least one non-insertable contact makes conductive contact with the at least one non-insertable feature, and the at least one insertable contact accepts the at least one insertable feature;

one or more integrated circuits located on the electronic circuit package; and a display coupled to the electronic circuit package.

- 28. (Original) The electronic system as claimed in claim 27, further comprising a device to apply a sustained, vertical, compressive force to increase a contact pressure between the at least one non-insertable feature and the at least one non-insertable contact.
- 29. (Original) The electronic system as claimed in claim 27, further comprising a device to apply a sustained, normal force to increase a contact pressure between the at least one insertable feature and the at least one insertable contact.
- 30. (Original) The electronic system as claimed in claim 27, wherein the electronic system comprises a server computer.
- 31. (New) A receptacle comprising:

a body;

at least one non-insertable contact having contact portions exposed at a first surface of the body of the receptacle; and

at least one conductive, low insertion force, insertable contact having an opening on the first surface and conductive structures within the body of the receptacle,

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wherein the at least one non-insertable contact and the at least one conductive, low insertion force, insertable contact are arranged to make electrical contact with non-insertable features and insertable features of a single electronic circuit package brought into contact with the receptacle, and wherein the at least one conductive, low insertion force, insertable contact is to provide a vertical insertion force to engage the insertable features with the receptacle.

- 32. (New) The receptacle as claimed in claim 31, wherein the receptacle comprises a socket.
- 33. (New) The receptacle as claimed in claim 31, wherein the receptacle comprises a printed circuit board.
- (New) The receptacle as claimed in claim 31, wherein the at least one non-insertable 34. contact includes a land grid array contact.
- 35. (New) A receptacle comprising:

a body;

at least one non-insertable, land grid array contact having contact portions exposed at a first surface of the body of the receptacle;

at least one insertable contact having an opening on the first surface and conductive structures within the body of the receptacle, wherein the at least one non-insertable contact and the at least one insertable contact are arranged to make electrical contact with non-insertable features and insertable features of a single electronic circuit package brought into contact with the receptacle; and

electrical interfaces on a second surface of the body of the receptacle, wherein the electrical interfaces are electrically connected to the at least one non-insertable, land grid array contact and the at least one insertable contact.

(New) The receptacle as claimed in claim 35, wherein the receptacle comprises a socket. 36.

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(New) The receptacle as claimed in claim 35, wherein the receptacle comprises an 37. interposer.